

Standard
PRODUCTION
REFERENCE

FLEISCHER STUDIOS, INC.
MIAMI, FLORIDA

1940

MAX'S COPY

The material for this book has been compiled by Izzy Sparber and Seymour Kneitel.

If clarification of any section of its contents is necessary, the above should be consulted for a verbal explanation.

FOREWORD

The purpose of this book is to familiarize Animators and their Assistants with the technical requirements necessary to the production of Animated Cartoons.

To produce cartoons efficiently, it is important to know how to obtain the best results with the least amount of work.

Established short cuts, if used to advantage, make for high efficiency and enhance the artists value to himself and to the company. Animation on TWOS--clever use of repeats--elimination of unnecessary tracebacks by use of the three cel levels--handling crowds by impression rather than drawing each character--the use of an overlay blocking off a large part of the crowd--these are but a few of the practices which make for efficiency.

It is important that artists thoroughly acquaint themselves with these methods and plan their scenes with the standards established herein. Read the book carefully and keep it on your desk at all times for a handy reference. For your convenience, it is indexed so that solutions for everyday problems may be found with a minimum of delay.

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GENERAL NOTES

Before starting a scene, be sure you understand the necessary "business" called for. If in doubt about anything, please check with your Head Animator.

Originality is desirable but it must be in keeping with what your particular scene is designed to "put over". The Head Animator must be consulted about any new business that you wish to insert into a scene. The production as a whole must appear unified. The characters must be uniform in appearance and have the same touches of personality. Where model charts have been established, check with them frequently.

Don't put unnecessary details on props which are introduced by you into a scene for which no models have been made. Keep shading and highlighting down to greatest possible simplicity and if in doubt, check with the Head Animator. Don't use highlights on eyelids, except in very unusual cases or in extreme close-ups. It is imperative that all layouts and action be carried at least half inch outside the cutting field on all sides.

Make it a point to notify the Head Animator at least a day before you expect to finish your scene.

Don't spend time cleaning up or breaking down drawings which your Assistant is capable of doing.

Before a scene is turned over to your Assistant to be broken down, it must be checked with the Head Animator to determine whether the basic idea has been carried out. His initialed O.K. must appear in the upper left hand corner of the first exposure sheet.

After a scene is broken down and ready for Inbetweening, it must be checked by the Animator and his initialed O.K. must appear under the Head Animator's on the first exposure sheet.

The footage of a scene is reported on the Time Card by the Animator when it is completely cleaned up by his Assistant and ready for Inbetweens. In the case of an Animator doing his own Breakdowns, footage is to be reported when he has completed the Breakdowns.

DON'T REMOVE DRAWINGS, EXPOSURE SHEETS, LAYOUTS, ETC., FROM ANY SCENE WHICH IS NOT ON YOUR OWN DESK, without leaving a memo with the scene clearly stating where the removed drawings, layouts, sheets, etc., were taken.

ABBREVIATIONS

The following abbreviations have been standardized in order to simplify the writing of notes and instructions. Familiarize yourself with them and if a term is to be abbreviated, be sure to use the correct one. DO NOT USE any other abbreviations for these terms as it will confuse all departments required to handle the scene. After determining which abbreviation you desire to use, PRINT IT CLEARLY.

A (With circle around it)	Action. (This abbreviation used <u>only</u> for indicating in which fields action is to be inked on sliding cels.)
Act.	Action
Anim.	Animation
Anim'r.	Animator
Anim-Str-Ahd.	Animate straight ahead
App.	Approach
Ass't.	Assistant
B (With circle around it)	Blank Field. (This abbreviation used <u>only</u> for indicating which fields are to be blank on sliding cels.)
Bkg.	Background
Blk-Mask-F.	Black Mask Field
Bot.	Bottom
BP.	Bottom Pegs
BCP	Bottom Center Peg
BLP.	Bottom Left Peg
BRP.	Bottom Right Peg
Brk-Dwn.	Break Down
Bt. ($\frac{1}{2}$ -BT, $\frac{1}{4}$ -BT.)	Beat ($\frac{1}{2}$ Beat, $\frac{1}{4}$ Beat)
Cam.	Camera
CD.	Complete Drawing
Cel.	Celluloid
Col.	Color----Coloring
C.O.	Cut Out
CP.	Center Peg
C.U.	Close-Up
Cut.	End of a Scene
X-diss.	Cross Dissolve

Dwg.	Drawing
Dept.	Department
Diag.	Diagonal
Dial.	Dialogue
X's.	Exposures
Exp.	Expose---Exposures
Ext.	Extreme
F. (F-A, F-B, etc.)	Field (Field A, Field B, etc.)
Fol.	Follow---Follows
Fin.	Final
Forgnd.	Foreground
Fr.	Frame
Ft.	Foot----Feet
Ftg.	Footage
FTO.	For Tracing Only
H (With circle around it)	Hold (Only used for indicating pan move holds on Exp. Sh.)
Hor.	Horizontal
H.U.	Hook-up
In. or (")	Inch-----Inches
Inb.	Inbetween
Inb'r.	Inbetweenner
L.	Left (Only used when referring to direction of pan or cel moves.)
LF.	Large Field
LF SB	Large Field Set-back
LF SP	Large Field Sliding-Pegs
LP	Left Peg
L.S.	Long Shot
Lev.	Level
M-to-18	Match to Drawing 18
Mod.	Model
Med.	Medium
Mid.	Middle
Mus.	Music
O-lay	Overlay
ONES	One exposure for each move
O.R.	Off Register

P #
Pan
Pos.
Ppr.
Pre-sync.

Post-sync.

Prod.
PT.

R.
Reg.
Rpt.
Rev.
RP.

S-1, S-2, S-3, etc.

SB
Sc.
Sc-#
Sh.
SE.
Sldg.
SF.
Sm.
Sync.

T-#
T-18
TP.
TB.
TCP.
TRP.
TLP.
TWOS

THREES

U-lay

Vert.

X-diss.
X's.

Punch number
Panorama
Position
Paper
Pre-synchronized. (Re-
corded before cartoon
is made)
Post-synchronized (Re-
corded after cartoon
is made)
Production
Pencil Test

Right
Register or Registry
Repeat
Reverse
Right Peg

Sync 1, Sync 2, Sync 3,
etc.
Set-back
Scene
Scene Number
Sheet
Sound Effect
Sliding
Standard Field
Small
Synchronize

Take Number
Trace Drawing 18
Top Peg
Trace Back
Top Center Peg
Top Right Peg
Top Left Peg
Two Exposures for each
move
Three exposures for each
move

Underlay

Vertical

Cross Dissolve
Exposures

INSTRUCTIONS TO THE ANIMATION DEPARTMENT

In order that scenes go thru the various production departments with the least amount of inter-departmental discussion (due to errors, confusing notes and bad planning by the Animator or the Assistant Animator) the following instructions MUST BE OBSERVED.

"Circle In" or

"Circle Out" There are 32 standard circles planned to work to or from the center of the Standard or Large Field. If it is necessary to "Circle In" or "Circle Out" on either of these fields, just call for the Standard Circles.

If it is necessary to "Circle In" or "Circle Out" off center, a chart for a new set of circles will have to accompany the scene.

Except for special effects, the standard length for a "Circle In" is one foot and two feet for a "Circle Out".

When circles are used, the following notes must appear on the Exposure Sheet and in the Camera Department section of the Large Pink Card:

Length of "Circle In" or "Circle Out".

Whether Standard or new set of circles is to be used.

Cross-
Dissolves

Cross-dissolves between scenes are limited to exactly 2, 3, or 4 feet, except for special effects.

Dissolves within a scene are not limited in length.

When scenes dissolve to other scenes, it is necessary for them to reach the Camera Department simultaneously. If there is a long stretch of dissolves without a cut, it will not be possible to photograph any of the scenes involved until all have been colored, planned, etc. If a retake is necessary in any of these scenes, all other scenes that it dissolves to or from, will also have to be rephotographed.

Therefore, do not call for a dissolve unless you feel that it is absolutely necessary. If too many scenes are combined by dissolves, plan for a cut somewhere in this section to break it up.

Registry marks
for Pans

All horizontal pan registry marks should register to the line on the center peg, except when the Pan changes to a vertical or diagonal Pan moving down. In this case, use a registry mark at the bottom of the field corresponding to line on top center peg.

For vertical and diagonal pans, a registry mark must be made on a separate sheet of paper to accompany the scene. This mark should be about one inch below the pegs on the right or left hand side of the field, depending on which side will keep the Pan Move Scale outside of the action part of the background.

If a pan changes from a horizontal to a vertical or diagonal pan, be sure you have the background on the pegs in register to its last horizontal pan position before creating a new registry mark. (Use the same procedure in going from a vertical or diagonal pan to a horizontal, or from a vertical to a diagonal pan.)

How to indicate START and STOP registry positions on pans - ALL START and STOP positions on a pan (with the exception of HORIZONTAL SLIDING-PEG PANS) must be marked with a letter underneath the number of the pan move. Thus, the START of a pan would be marked "1-A". If the background starts to pan and is stopped at PAN POSITION 43, it would be marked "43-B". If the background starts panning again, stopping at PAN POSITION 84, it would be marked "84-C"-etc.

If you cut away from a scene and pick it up again in a new position, it must be marked with a new letter picking up alphabetically from where the last pan position left off.

Exposing
of pans

All pan moves and the letters with them indicating the START and STOP positions must be exposed on the exposure sheets thru-out the scene. (See SAMPLE EXPOSURE SHEET)

Timing
of pans

All pans must be exposed on ONES. All action in direct contact with a pan must also be exposed on ONES. But, if it is a bird flying, a waist-up shot, or any other similar action where there is no direct contact with the background, the action can be exposed on TWOS, while the pan background is exposed on ONES.

Starting
and Stopping
of pans

Graduate the speed of a pan to ease out of the starting and also into the stopping position. The only exception to this rule should be where an effect of a sudden start or stop is necessary.

Pan Mark-
ing Strips

These strips have been printed to save the time of marking off pan moves on the back-ground and trace-up guides on the SHIFT CHART.

They are printed in 16-inch lengths with a gummed surface on the reverse side. They are to be cut down to the necessary length and pasted in position on the back-ground where the pan moves would ordinarily be marked. Where a pan length totals more than 16 inches and additional strips are necessary, these strips are to be matched up at the inch lines.

For accuracy, it is advisable to wet only about three inches at a time when pasting the strips down.

The markings on these strips are spaced down to a 32nd of an inch. A dot, made with a black pencil, should be on every marking intended for use in panning. By this method, speeding and slowing up of a pan can easily be taken care of. To move a pan at a 64th of an inch, call for the pan to be registered on and inbetween the 32nd inch markings.

These strips may also be employed as guides for animating in one spot an action used with a pan background, by marking off the speed of the pan with dots and animating the action sliding back to match these dots.

Animation on
TWOS

Instead of planning animation to be exposed on ONES, leaving TWOS the exception to the rule, ALL ANIMATION SHOULD BE PLANNED TO BE EXPOSED ON TWOS, AND ONES SHOULD BE THE EXCEPTION. Actually, about 80% of all action can be shot on TWOS without harmful effect to the picture.

In fast actions, it is necessary that exposures be retained on ONES, where it is impossible to have the action follow in arcs on TWOS, and where the spacing between drawings lacks overlapping of the action. Also pans, which must be exposed on ONES are those having characters or objects in contact with the pan. But if it is an action that has no direct contact with the pan, it should be exposed on TWOS, while the PAN is on ONES, providing the action itself permits it. Even so-called "LIVELY ACTION" can be successfully shot on TWOS.

Where mouth actions occur with a character that can be exposed on TWOS, don't figure it for ONES because of this. Actually mouth actions can work just as well on TWOS as they do on ONES, except in very fast mouth actions. In this case call for the heads to be inked on separate cels from the body, exposing them on ONES and expose the main body action on TWOS. In this case the jump in the cel-level will be taken care of by using the necessary top, middle and bottom opaques.

Don't plan action on ONES, where it can be on TWOS because of a camera approach or recede. The Timing Department will check the scene for this before it goes to the Inbetween Department and if necessary they will call for the extra inbetweens and expose them on the exposure sheets.

Animation
on THREES

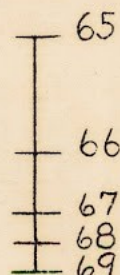
It is possible to animate an action on THREES only if there is no more than the thickness of a pencil line between each of the drawings when all the inbetweens have been completed. The close spacing must be drawn carefully and inbetweened just as carefully.

Do not animate an action on THREES during an APPROACH, RECEDE, or a CAMERA PAN.

Spacing of
Inbetweens

If there is a particular spacing required for the inbetweens, a guide should be drawn on the extreme into which the inbetweener is supposed to work.

EXAMPLE:



Trace-Backs

Do not call for Trace-Backs unless you are already working on a three cel level. It is not necessary to keep a scene on a one or two cel level if it necessitates unnecessary trace-backs.

Sliding-
Cels

Sliding-Cels are not to be generally used, except under the SLIDING-PEG CAMERA.

For this type of action on any of the other cameras, a SHIFT CHART must be made to carry the action in, out, or to any section of the scene.

You are permitted the use of one sliding cel on any of the cameras if a drawing that cannot be a cut-out must pan in or out of the scene.

Where a drawing can be used as a cut-out instead of a sliding-cel, it is better to use it as a cut-out (in a pan only), regardless of the cel-levels.

If the use of sliding-cels on any of the other cameras will avoid considerable trace-ups, obtain an initialed O.K. on the pink card from the head of the Timing Department.

Registry for
Sliding Cels

Sliding-Cels must be planned to register to the line on the center peg.

FEISCHER STUDIOS
SHIFT CHART

JOB NO. _____ SCENE NO. _____ FOR MAKING CELLS _____ TO _____ TRACED FROM DRAWINGS _____ TO _____
DRAWINGS _____ TO _____ ARE ALSO USED IN THEIR REGULAR POSITION ON THE PEGS.

THIS SHIFT CHART PAPER CAN BE OBTAINED FROM THE SUPPLY DEPARTMENT IN BOTH SMALL AND LARGE FIELD PAPER.

We are limited to using SLIDING CELLS in HORIZONTAL PANS, only on the STANDARD & LARGE FIELD SLIDING PEG CAMERA. A SHIFT CHART must be laid out for this type of action to be used on any of the other cameras and in all DIAGONAL & VERTICAL PANS.

METHOD OF LAYING OUT SHIFT CHART:

A line running parallel with the direction in which the PAN or ACTION is moving is drawn on the SHIFT CHART. A guide mark, indicating the peg registry to the action, is made as a cross on this line. Guide moves are then similarly drawn from the Peg registry mark in the direction toward which the action is moving, until it is in its new position or out of the scene. With regard to slowing in and out of holds, these moves must be calculated to indicate which drawing must be traced move must be numbered to indicate which drawing must be traced in that position. If it is a repeat, or drawings previously used on the pegs that are to be traced this way, new numbers must be used to take care of the additional cels. The repeated drawing must be numbered below each guide move and the new number above each corresponding guide move. The new numbers must be exposed on the exposure sheets. (Pan marking strips may be used for laying out guide moves.) Be sure to fill out the heading on the shift chart sheet.

Animation to
Background
Layout

Always use your Background Layout on the animation board while you are animating so that your characters will always be in the correct perspective and proportion to it. The animator is not permitted to change any lines on the Background Layout. If this is necessary, the layout man must be consulted to make these changes. Notate all intricate matching lines on the background.

Scene Numbers
on Backgrounds

All backgrounds must be stamped with the JOB STAMP in the upper left hand corner and the JOB NUMBER, SCENE NUMBER and FOOTAGE of all scenes used with the background must be written in.

JOB NO.	
SC. NO.	FEET

Numbering
the Drawings

Don't mix up the numbers of the drawings in your scene any more than is necessary. Keep the drawings in straight numerical order as much as possible. A mixed combination of numerals will result in needless waste by confusing every department and may eventually ruin the scene.

Do not put numbers in odd places on your drawings. Always place final numbers in the upper right hand corner.

Exposure
Sheets

There are two types of Exposure Sheets:

1. GREEN EXPOSURE SHEETS...To be used with any action planned to definite music.
2. WHITE EXPOSURE SHEETS...To be used for action that is not planned to definite music. This means Ad-lib action or action planned to Beats, Phrases, or a pattern of music.

ALL POST-SYNC DIALOGUE MUST BE PREPARED
BY THE MUSIC DEPARTMENT.

HEAD ANIMATOR'S O.K.
ANIMATOR'S O.K.

FLEISCHER STUDIOS INC.

SHEET No. **✓**

✓ EVERYTHING CHECKED ON THE HEADING OF THIS SHEET MUST BE
✓ FILLED IN ON EVERY EXPOSURE SHEET
✓ IN THE SCENE.

Job No. _____

Title _____

Scene No. _____

Animation by _____

Inbetweens by _____

Inking by _____

MUSIC			ANIMATION			CAMERA		
Music Instructions	Mouth Actions	Beats	Dial No.	ACTION	Notes on every sheet thru-out the scene.	Dial No.	Pan	Except when using pegs (See sample exposure sheet for sliding peg action.) Do not write in these three columns. They are used by the Camera Dept. *****
Be sure that DIAL NUMBERS run in consecutive order thru-out the scene. (There A & B Exposure sheets, both completing a section of 100 exposures.)			01	This column is for the animator to use if necessary for planning his action.	This EXPOSURE SHEET must be a numerical picture of your scene.	01		Expose all pan moves with their start & stop letters
			02			02		
			03			03		
			04			04		
			05			05		
			06			06		
			07			07		
			08			08		
			09			09		
			10			10		
After DIAL 100 add a one to the Dial No. at the beginning of the subsequent sheets until DIAL 200. Add twos to the Dial Nos. thereafter etc. to the end of the scene.			11			11		Indicate all change of BKG. POS. directions to which for PANS in the DWGS. this column used in that frame which it register.
			12			12		
			13			13		
			14			14		
			15			15		
			16			16		
			17			17		
			18			18		
			19			19		
			20			20		
List all post-syne sound effects ON THAT FRAME to which animation synchronizes.			21			21		Indicate length of all camera PANS, APPROACHES or RECEDES.
			22			22		
			23			23		
			24			24		
			25			25		
			26			26		
			27			27		
			28			28		
			29			29		
			30			30		
Exposure Rolls are clipped to the Exposure Sheets in this section.			31			31		
			32			32		
			33			33		
			34			34		
			35			35		
			36			36		
			37			37		
			38			38		
			39			39		
			40			40		
When two or more Sound Tracks are being used together they must be clipped to the Exposure Sheets, one over the other. The top ones must be clipped along the side only, to permit those underneath to be read.			41			41		
			42			42		
			43			43		
			44			44		
			45			45		
			46			46		
			47			47		
			48			48		
			49			49		
			50			50		

THE ANIMATOR IS REQUIRED TO PLAN HIS SCENE FOR INKING AND PHOTOGRAPHY AS HE ANIMATES AND EXPOSES.

1-A 8

9

2

3

Draw a RED CIRCLE around all HOOK-UP drawings.

Line drawn at bottom of last frame of a hold indicates where cel is to be removed.

During a CROSS-DISSOLVE EXPOSE SCENE dissolving out here

Scene that is being dissolved in must be exposed here.

Use this column for exposing CUT-OUTS of scene dissolving out.

FILL OUT THE HEADING OF EVERY TRACING GUIDE USED WITH THE SCENE.

Indicate what No. guide this is #

TRACING GUIDE

No

-13-

Job No.

Scene No.

Drawings to also inked separately.

CEL. NO.

TRACE DRAWINGS AS FOLLOWS:

The TRACING GUIDE is used to combine some of the actions in the scene in order to retain a three cel level.

It is very important in combining repeats, that you make every effort to keep them in MULTIPLES OF THE SAME NUMBER OF DRAWINGS, so as to avoid unnecessary trace-ups to get into a hook-up.

List the drawings to be combined in the order in which they are to be traced, reading from left to right. A drawing, that overlays another with which it is to be combined, should be inked first. Hook-up drawings must be circled in the same manner as those appearing on exposure sheets.

Give the combined drawings a new set of numbers. Unless any of the separate drawings making up a combination are to be used alone, let these new numbers be the only ones to appear on the exposure sheets.

4 cel scene O.K.'d by _____
Reverse side of this card properly filled out

Ass't. — Timing Dept.

1. Details on drawings check through
2. Hook-ups clearly noted on drawings
3. Cut-outs clearly marked on drawings
4. Matching indicated where necessary
5. Trace-backs clearly noted on drawings
6. Check movement of act. with Pan Bkg.
7. Act. completed $\frac{1}{2}$ " beyond cutting field
8. Top and Bottom Pegs clearly indicated
9. Tracing Guides properly laid out
10. Shift Charts properly slided out
11. Registry of cut-outs or sliding cels in relation to pan noted on drawings and sheets

1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

1. Job No., Scene No. and Footages indicated
2. Start and Stop positions indicated on Pan Bkg.
3. Handling of O-Lays and U-Lays indicated
4. Special handling indicated on drawings and Pink Card

[illegible]

1. Characters listed in column headings
2. Drawings or Bkgs. from other scene listed
3. Necessary Field notes exp. thru-out Scene
4. Fades, start and cut indicated
5. Proper camera called for
6. Approach's and Recedes clearly exposed
7. Cross dissolves (to or from) exposed
8. Cel levels taken care of
9. Cut-outs exposed thru-out scene
10. Drawings on TWO'S working together
11. Hook-ups indicated with red circle
12. Pan moves exposed thru-out scene
13. Exp. sheet headings filled out
14. Dial Nos. in consecutive order (Numbered)

Blank lined paper for notes.

Assistant's Name Timer's Name

THIS CARD SHOULD BE A CONDENSED VERSION OF THE TECHNICALITIES OF THE SCENE.

FLEISCHER STUDIOS

Job No. _____		Title _____	Scene No. _____							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">MODEL</th> <th style="width: 50%;">DWG. No.</th> </tr> <tr> <td colspan="2" style="padding: 5px;"> IN THIS BOX LIST AT LEAST ONE DRAWING OF EVERY CHARACTER AND PROP IN THE SCENE, PREFERABLY THE DRAWING WHICH REVEALS IT MOST CLEARLY AND COMPLETELY. </td> </tr> </table>	MODEL	DWG. No.	IN THIS BOX LIST AT LEAST ONE DRAWING OF EVERY CHARACTER AND PROP IN THE SCENE, PREFERABLY THE DRAWING WHICH REVEALS IT MOST CLEARLY AND COMPLETELY.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Description</th> <th style="width: 50%;">FILL OUT HERE A BRIEF DESCRIPTION OF THE MAIN ACTION IN THE SCENE.</th> </tr> <tr> <td colspan="2" style="padding: 10px;"> ((This card must accompany the scene thru all the production departments. All the details for the technical handling of the scene must be properly filled in.) </td> </tr> </table>		Description	FILL OUT HERE A BRIEF DESCRIPTION OF THE MAIN ACTION IN THE SCENE.	((This card must accompany the scene thru all the production departments. All the details for the technical handling of the scene must be properly filled in.)	
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Animated by _____		Footage _____								
DEPARTMENTAL INSTRUCTIONS										
BACKGROUND DEPT. Type Bkg. Used _____ Bkg. Used with Sc. _____ Bkg.—Overlays FILL IN ALL NOTES CONCERNING ANY SPECIAL HANDLING OF BKG. Bkg.—Underlays LIST ALL CELS TO BE RETOUCED BY BKG. DEP'T. LIST ALL List C. O.'s to be rendered by Bkg. Dept. OVER-LAYS AND UNDER-LAYS. NOTE WHETHER BKG. IS A STILL OR A PAN AND IF USED FROM, OR WITH, ANOTHER SCENE. OK'ed by _____										
TIMING DEPT. Exp. Sheets # _____ To # _____ (LIST ANYTHING OUT OF THE ORDINARY THAT WILL HAVE TO BE WATCHED IN CHECKING.) OK'ed by _____		MUSIC DEPT. (LIST PRE-SYNC AND POST-SYNC TALKS AND EFFECTS IN SCENES.) OK'ed by _____								
INBETWEEN DEPT. ALL SPECIAL NOTES TO THE INBETWEENER MUST APPEAR HERE. IF THE INBETWEENER IS TO SEE THE ANIMATOR BEFORE INBETWEENING THE SCENE, THE NOTE MUST APPEAR HERE. OK'ed by _____										
INKING DEPT. ALL SPECIAL NOTES TO THE INKER MUST APPEAR HERE. Cels Used From Other Sc's. _____ Tracing Charts _____ Tracing Guides _____ Sliding Cels _____ OK'ed by _____										
PLANNING DEPT. _____ _____ _____ Planned by _____		COLORING DEPT. Sample Cels _____ ALL SPECIAL NOTES PERTAINING TO THE COLORING OF THE SCENE MUST APPEAR HERE. _____ Matched by _____ OK'ed by _____								
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Photo by _____ OK'ed by _____										

Characters
and Props

Keep characters uniform by checking with the original models. Be sure that all color separations are drawn in with a definite line closing in these areas. Check props handled in your scene with other scenes using these props, for uniformity in handling.

Handling
of Shadows

Don't make large shadows under characters except for special effects. Keep them small and narrow, bearing in mind that usually their purpose is simply to indicate how far off the ground the character is. Make them disappear entirely when the character stops in one place, unless, of course, it is a special effect.

Presentation
of two or
more characters
in a scene

Don't forget to check on the coordination of the action when two or more characters are working in a scene at the same time. Not only should they look as if they react properly to each other, but they should be planned to give each other working space. This requisite may often be overlooked if each character is animated by itself, instead of using the others at the same time, as a check.

Animation of Effects

Do not pass lightly over Animation Effects such as splashes, dust, smoke, fire, water and blur or speed effects, believing them to be of no importance. They help the presentation of your scene and the proper number of drawings should be used for the right effect. It is also important to indicate with colored pencils, the various tones necessary, so that the inbetweeners can follow the action and the opaques apply color with the least amount of color flashes. See that all differently toned areas are closed in with definite lines.

Effects Card

Wherever possible, all effects will be planned to be carried out with "straight opaqueing."

If it is necessary to use transparent colors, dry brush, air brush or any retouching on a cel or a series of cels, an effects card, properly filled out, must accompany the scene. The animator need only fill in the information up to the dotted line. This card must go behind the regular window card on the folder.

If the effect involves more than one scene or has to be carried thru-out a picture, it must be O.K'd by Izzy Sparber or Seymour Kneitel.

SPECIAL EFFECTS FLEISCHER STUDIOS

JOB NO. _____ SCENE NO. _____
NAME EFFECT _____

AUTHORIZED BY _____

FIND INSTRUCTIONS _____

RETOUCH CELS FROM _____ TO _____

TRANSPARENCIES ☐ DRY BRUSH ☐
AIR-BRUSHING ☐ MISC. RETOUCHING ☐

USE SAMPLE _____ O.K'd BY _____

SCENE TO BE SENT TO
(BEFORE)-(AFTER)OPAQUING(Cross out)

NO. OF CELS TO BE RETOUCHED _____

CELS POLISHED FOR RETOUCHING BY _____

CELS RETOUCHED BY _____

RETOUCHING CHECKED BY _____

CELS POLISHED FOR CAMERA BY _____

O.K. FOR CAMERA _____

Window Cards
for folder

Two differently colored cards are used
each for a separate purpose. The
proper one for each scene, must be
used.

FLEISCHER STUDIOS

Job No. Sc No.

ANIMATOR Ft.

Bkgrd used with Sc No.

Bkgrd used with Sc No.

Colors marked Timed

Dwgs Stamped Stamped
for Inb'tnrs for Inkers

Foreign & Production Script OK

Inbetweened No. Dwgs

Inb'twns Ck'd OK to Ink

Inked Planned

Colored Matched

PINK WINDOW CARDS . . .
This card is to be used
when:

- (a) The scene dissolves to
or from another scene.
- (b) You use drawings from
another scene or draw-
ings from your scene are
used in another.
- (c) Background from one scene
is used in another.

FLEISCHER STUDIOS

Job No. Sc No.

ANIMATOR Ft.

Colors marked Timed

Dwgs Stamped Stamped
for Inb'tnrs for Inkers

Foreign & Production Script OK

Inbetweened No. Dwgs

Inb'twns Ck'd OK to Ink

Inked Planned

Colored Matched

Photographed

WHITE WINDOW CARD . . .
This card is to be used
when the background or
drawings in your scene
are NOT used in any
other.

INSTRUCTIONS FOR PENCIL TESTS

PENCIL TEST WINDOW CARDS.

This card, properly filled out, must appear in the folder of the scene or action to be Pencil Tested.

PENCIL TEST	
Job No. _____	Sc. No. _____
Inbetweened _____	No. Dwgs _____
OK for Camera _____	
Pencil Test Photo'd _____	
Pencil Test Ok'd _____	

Job Sheet

A Job Sheet, properly filled out, must accompany each scene. This Job Sheet will be photographed at the beginning of each pencil test.

JOB _____	SEQ. _____	SCENE _____
TEST # _____	TYPE _____	
DIRECTOR _____		
ANIMATOR _____		
FOOTAGE _____		
REMARKS: _____		
DATE _____		

FLEISCHER STUDIOS INC.

PENCIL TEST

SHEET NO. ✓

JOB NO# ✓

TITLE ✓

SEQ# ✓

SC# ✓

TEST# ✓

DIRECTOR ✓

ANIMATED BY ✓

INBETWEENED BY ✓

MUSIC		DIAL	DRAWINGS			CAMERA		
MA	B	NO.	T	M	B	PAN	FIELD	INSTRUCTIONS
		01						ALL CAMERA
		02						
		03						NOTES MUST
		04						BE INDICATED
		05						IN THESE
		06						COLUMNS.
		07						(FIELDS--
		08						DISSOLVES
		09						FADES FIELD
		10						MASKS ETC.)
		11						
		12						BE SURE TO
		13						NOTE IF
		14						BACKGROUND
		15						IS TO BE
		16						USED.
		17						
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MUSIC		DIAL	DRAWINGS			CAMERA		
MA	B	NO.	T	M	B	PAN	FIELD	INSTRUCTIONS
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Pencil Test
Exposure
Sheets

Each scene must be exposed on Pencil Test Exposure Sheets.

Dialogue...music...sound effects...and sound analysis, must be duplicated on the Pencil Test Exposure Sheets, using the same dial numbers as on the production exposure sheets. If the scene is being animated to beats, these must also be on the Pencil Test Sheets in their proper dial positions.

All camera instructions pertaining to the Pencil Test must be indicated on these sheets.

If the background is to be used with the pencil test, it must be called for on the Pencil Test Exposure Sheet, otherwise the scene will be photographed without a background.

Camera fields must be indicated.

Pencil Test Exposure Sheets for an O.K.'d pencil test must remain in the folder with the scene when it goes through for production.

If the timing of any part of an O.K.'d pencil test is changed, mark a cross thru that section on the Pencil Test Sheets.

Animation
for Pencil
Tests

If the action to be pencil tested is rather lively, it should be drawn in the rough only. This action should be handled as simply as possible, minus details, but still keeping its proportions and perspective relative to the background. Mouth actions are not necessary on these roughs.

If the action is rather closely spaced, it is advisable to animate for the pencil test in the clean up.

All mob and crowd scenes should also be animated in the clean up for the pencil test.

Rough animation will not go to the Inbetween Department. In this case the necessary inbetweens for the pencil test must be filled in by the Assistant.

A scene, animated in the clean up for a pencil test, should be sent to the Timing Department complete with all necessary information for the test. The Timing Department will check it; send it to the inbetween Department for any necessary inbetweens, and return it to the animator before the test for checking. The scene should then be returned to the Timing Department O.K.'d for the pencil test.

A single scene may be animated for a pencil test, part in the rough and part in clean up, depending on the action involved. If this is done, the Assistant will complete the roughs. The completed scene will then be sent to the Timing Department with a sheet of written instructions folded over the drawings requiring clean up inbetweens.

A scene animated for pencil test, whether in rough or clean up, should be handled just as you expect to have the action appear in final production.

After cleaning up a scene that has been animated in the rough for a pencil test, the inbetweened roughs should be kept separately with a note to the inbetweeners indicating whether or not roughs are to be used for inbetweening and if so, to what extent; i.e. whether to clean up the roughs or just use them for the general swing of the action, cleaning them up on new sheets.

Limit of
Paper
Levels

No more than three (3) sheets can be photographed for a pencil test at one time. It must be remembered that each sheet photographs transparently, and that all lines on the underlay drawings and on the background, will appear on the film.

The background must be counted as one sheet unless the background IS put on a cel for that purpose.

Type of
Background

A shaded or colored Background cannot be used for pencil tests. When a background is required, it should be drawn in outline, minus unnecessary details. For a pencil test, try to keep the action area in the background clear.

Color of
Pencil Lines

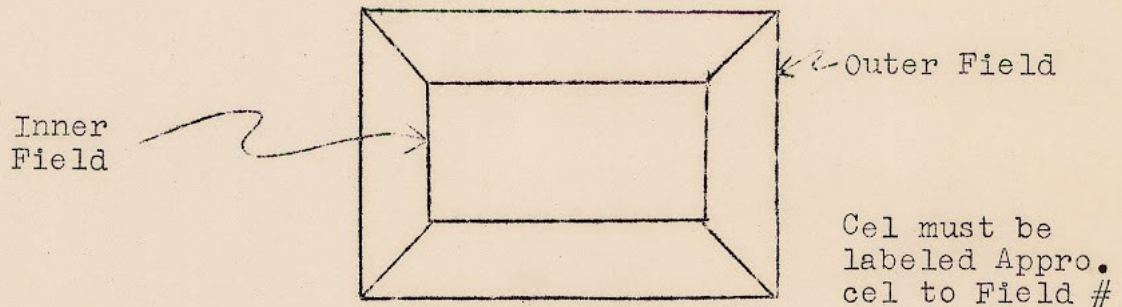
Drawings for pencil tests must be drawn
with black, red or sepia pencil lines.

Green, blue and violet do not photograph
and cannot be used for pencil tests.

Approaches

An approach from one field to another must
be arranged as follows:

Make a cel of the Cutting Fields, you
are approaching or receding from,
with a line drawn from each of the four
corners of one field, to each of the four
corners of the other.



This Approach Cel must be indicated on
the Pencil Test Exposure Sheet and is to
be held for the length of the camera
approach.

Approach
Field Mask

When Approach Field is reached, a mask
labeled "FIELD # _____" must be called for
on the exposure sheet, and is to be held
as long as the Approach Field is used.

Recede

If a Recede IS desired, reverse the above
process.

Cross
Dissolves

When one scene cross-dissolves to another,
it should be handled as follows:

A cross is to be drawn over the field of
a cel with instructions on the Exposure
Sheets for the Camera Department to
hold this cel for $\frac{1}{2}$ the length of the
dissolve at the end of the scene fading
out, and for $\frac{1}{2}$ the length of the dis-
solve at the beginning of the scene
fading in.

Fade Out
and Fade
In

If a scene is to Fade Out or Fade In, call for a cross-cel to be held over the field for the full length of the fade. "FADE OUT" or "FADE IN" should be lettered across the bottom of the cel in this case.

If an action is to Fade In or Fade Out, a cel lettered "FADE IN" or "FADE OUT" should be called for to flash on at the beginning of the fade and off at the end. This lettering should be clear of the action. The action should also flash on at the beginning of the fade, and flash off at the end of it.

Sliding
Pegs

There are no Bottom Sliding Pegs on the Pencil Test Camera, only Top Sliding Pegs.

If your scene calls for Top and Bottom Sliding Pegs, the test will have to be shot in two sections.

Action that must be traced on a Shift Chart for final production, may be used for a pencil test on the sliding pegs under the Pencil Test Camera.

Pans

Horizontal Pans are the only ones that can be used with action drawings on the Pencil Test Camera.

Fast diagonal or vertical pans, however, can not be used with action drawings and may be shot as follows:

Make a paper layout of the pan with pan moves indicated and the background roughly traced. At the beginning of this pan layout, trace the drawing used when pan starts moving, and at the end of the layout, trace drawing used when the pan stops.

Loop Shots

Loop Shots must be exposed for not less than four feet.

All instructions must be in writing and must accompany the scene. Verbal instructions will be considered as NO INSTRUCTIONS.

If it is necessary that the Inbetweener see the Animator before inbetweening the clean-ups for a Pencil Test scene, a note to that effect must be clipped to the folder.

STANDARD FIELD CAMERA
(Black & White or Color)

Field Range	The abbreviated term for this camera is "SF-CAM." This camera is a <u>set field camera</u> and <u>cannot be moved in any direction</u> . It is the smaller of our two set fields.
Background Panning Range	On this camera you can pan vertically, horizontally, or diagonally at any angle.
Limitations	You cannot shoot an Approach or a Recede or use any of the Approach Fields on the Standard Field Camera. You cannot shoot a scene using Sliding Pegs on it. (A shift chart must be used instead.) However you can make use of the Standard Field Sliding Peg Camera on the Standard Field.
When to Use the Standard Field Camera	<p>If your scene does not call for an Approach, Recede or Sliding Pegs, either the Standard Field or Large Field Camera <u>must</u> be used.</p> <p>The only exceptions to this, would be in the animation of a close-up where it would save the making of unnecessarily large drawings by shooting it on a smaller field on the Approach Camera, or a cut to an action or background already used, that would necessitate a different size field. In other words, <u>use this camera as much as possible.</u></p>

LARGE FIELD CAMERA
(Black & White or Color)

Fields Range allowed	The abbreviated term for this camera is "LF-CAM." This camera is a set field camera and can not be moved in any direction. It is the larger of the two set fields. (#1 field on the pegs.)
Background Panning Range	You can pan vertically, horizontally, or diagonally at any angle with this camera.
Limitations	You cannot shoot an Approach or a Recede or use any of the Approach Fields on the Large Field Camera. You cannot shoot a scene using Sliding Pegs on it. (A Shift Chart must be used instead) However, you can make use of the Large Field Sliding Peg Camera on the Large Field.
When to Use the Large Field Camera	This camera should only be used for animating long shots that would be more difficult to handle on the smaller field.

APPROACH CAMERA
(Black & White)

The abbreviated term for this camera is "APP-CAM."

It is important that you do not use any of the Approach Cameras unless the action in the scene necessitates it. Don't make a layout and then lay the various fields over it to see which one will fit best. If the Approach Camera is not necessary, compose your layout in either the Standard or Large Field. Don't plan your scene with slight shifts of the field.

Extent of
Approach or
Recede

This camera can be used for Approaching or Receding between field #1 and the smallest field, #16, used in any section within the cutting field of the #1 field.

Limitations
for Handling
Pans

There are no limitations in the scene if you are panning horizontally only.

Vertical pans can be used if they do not exceed the width of the large field paper.

If a horizontal pan is on either end of a vertical pan, you must plan your background with a splitting section, so that the horizontal section of the pan can be disconnected during the vertical panning.

In a horizontal pan, you cannot pan a vertical pan in or out if it is above the pegs, without a splitting section planned to be disconnected during the horizontal panning.

Diagonal
Pans

There are extreme limitations on the angle for a diagonal pan on the Approach Camera. Check with steel-plate "Diagonal Pan Guide for the Approach Camera", showing the extreme angles and limitations of cutting field. If the diagonal pan is necessary, lay out the angle you intend to pan, and the size cutting field you intend to use, and check them with the Camera Department. A Camera Department O.K. must be initialed on the background layout.

Use of Cutting
Fields

Black Mask Fields (number 1 to 16) are all projection cutting fields. These are the only fields you are permitted to use at any stopping point in an approach or a recede. Do not call for intermediate fields.

How to Indi-
cate Camera Arc
in Curved
Camera Pans

Find the exact centers of your fields by drawing a cross from the corners of the cutting field, then indicate the desired arc for the camera pan by drawing this curve from the center of one field to the other.

Dotted lines on cels attached to fields are the Safety Fields. All important action and lettering must be inside of this Safety Field. The Safety Field is to be used only as a guide to make certain that important action is within its limits. Never put the safety field on any of the drawings. It may become confused with the Cutting Field. In other words, the only fields that will go thru production with a scene are the Cutting Fields. Each Scene, designated for the approach camera, must be accompanied by a tracing of the cutting field used in that particular scene.

Composition of
Scene

All scenes will be laid out in composition with the Cutting Fields.

How to Call for
Cutting Fields

Never refer to the Cutting Fields by the numbers indicated on them. Instead call them, Field A--B--C--etc. Be sure a tracing of the field or fields used accompanies the scene thru production. When the same field is used in two or more scenes, a tracing of the field or fields must accompany each scene.

Fields must be exposed on the Exposure Sheets thru-out the scene in the Field Column and also noted in the camera section of the Large Pink Card.

Distance that
Action Must be
Carried Out-
side of Cutt-
ing Fields

IT IS IMPERATIVE THAT ALL LAYOUTS AND ACTION BE CARRIED AT LEAST HALF AN INCH OUTSIDE OF THE CUTTING FIELD ON ALL SIDES. Be sure that the size of paper on which you are animating permits the action to be carried this distance beyond the cutting field.

Effects that
can Be Handled
with the App-
roach Camera

You can completely revolve a scene, including the cel action, on a still background only if it is within the size of our #9 field centered on the pegs. The background, in this case, must be rendered to our #1 Cutting Field.

You can also obtain swinging and rocking effects, but do not plan these scenes without first consulting the Camera Department.

APPROACH CAMERA
(color)

The abbreviated term for this Camera is also "APP-CAM."

The instructions for the use of this camera are the same as for the Black and White Approach Camera with the exception of the size field you can approach.

The smallest field you can approach in the center of your #1 field is field #13.

The smallest field you can approach in any corner of the #1 field is field #12.

STANDARD FIELD SET-BACK CAMERA
(Black & White or Color)

The abbreviated term for this camera is "SFSB-CAM".

The purpose of this camera is to give a third dimensional effect to the background. The glass on which the cels are shot is mounted vertically in front of a large turntable where an actual miniature set is constructed. This set is built in perspective and turns on a pivot point so that the farther an object is from the lens, the slower it moves, thus creating an illusion of depth in the background.

This camera should only be used in PANS and for scenes that will show up this effect to best advantage.

Fields Allowed

This camera is a set field camera and can not be moved in any direction. It is the smaller of the two Set-Back Fields. (Check with steel-plate standard field for exact size of field.)

Background Panning
Allowed

You can use horizontal, vertical or diagonal pans on the Set-Back Camera. You can go from a horizontal to a vertical to a diagonal or any combination of the three.

Limitations

You cannot shoot an approach, a recede, or any approach field, or call for sliding pegs on this camera.

Background Layout

A layout to be used for this camera is drawn up the same as it would be for the ordinary pan, but efforts should be made to have an arrangement to allow for objects in the background to cross each other in panning.

Pan Moves

Plan your pan moves the same as you would for the ordinary pan.

Animation

Action must be planned so that there is no direct matching to anything in the Set-back Set.

Overlays

If an overlay is arranged to extend below the bottom Cutting Field, it can be a Cut-out, thereby saving a cel.

If the overlay is within the Cutting-Field, it must go on a sliding cel.

Cel Levels

Three cel levels are allowed. The general rule for jumping cel levels applies here too. Cut-outs or repeats on sliding cels cannot be used, but one sliding cel may be used to pan a cut-out in, out, or thru a scene.

It is a good principle in animating for the set-back camera to keep the cel levels down as low as possible, that is, if it does not necessitate unnecessary trace-backs. Best results are obtained with single cel action.

How to Arrange for a Set-Back

Before you definitely plan your scene for a Set-Back shot you must consult Johnny Burks.

LARGE FIELD SET-BACK CAMERA
(Black & White & Color)

The abbreviated term for this camera is "LFSB-CAM".

Field Allowed	This camera is a set field camera and cannot be moved in any direction. It is the larger of the two set-back fields. (Check with steel-plate Large Field for exact size of field.)
Background Panning Allowed	Only horizontal pans can be shot on this camera. The same instructions that hold for the Standard Field Set-Back Camera hold for the Large Field Set-Back Camera with the above exceptions.

Be sure to see Johnny Burks before definitely planning to lay out a Large Field Set-Back shot.

STANDARD FIELD SLIDING PEG CAMERA

LARGE FIELD SLIDING PEG CAMERA
(Black & White or Color)

The abbreviated term for the Standard Field Sliding Peg Camera is "SFSP-CAM".

The abbreviated term for the Large Field Sliding Peg Camera is "LFSP-CAM."

The purpose of these cameras is to save unnecessary work and trace-ups. They should only be used where such savings can be accomplished.

The sliding-pegs can only be used in horizontal actions and pans.

Both cameras have practically the same limitations, the only exception being that no more than four field sliding-cells may be used on the large field camera.

Types of Action
Adaptable to
Sliding-Pegs

A repeat action, used in various sections of the scene, is adaptable. If otherwise, it is advisable to call for a Shift-Chart instead of using sliding-cells.

- a. For bringing a repeat action through, in or out of a still scene;
- b. For bringing a repeat action through, in or out of a pan;
- c. For panning an action, (not in a panning action itself) in, or out of a scene. The advantage in this case, is that on the sliding-pegs, this action may be exposed on twos, whereas, in the regular pan it must be on ONES.

Exceptions for
Sliding-Pegs

They cannot be used on an Approach or a Recede or on any field but the Standard or Large Field.

They cannot be used on a Set-Back layout.

They cannot be used in a vertical pan.

They cannot be used in a diagonal pan.

Handling of
Pans

You may switch from a diagonal or vertical pan (action must register on the standard peg position) to a horizontal pan using the sliding-pegs, or vice versa with the following restrictions:

- A. If the background is required to move diagonally or vertically up, you are limited to using only the top sliding-pegs for your animation in the horizontal pan before or after changing the course of the pan background to the diagonal or vertical pan.
- B. If the background is required to move diagonally or vertically down, you are limited to using only the bottom sliding-pegs for your animation in the horizontal pan before or after changing the course of the pan background to the diagonal or vertical pan.
(The above restrictions are due to the pan background interfering with the sliding-pegs as it pans in or out.)

Registry Marks

The line on the center peg is the key registry position for all drawings, cels, and backgrounds in horizontal actions.

If the horizontal pan changes to a diagonal or vertical pan or vice versa, use a Registry Mark for the diagonal or vertical pan on a separate sheet of paper to accompany the scene. This mark should be about one inch below the top pegs on the right or left hand side of the field, depending on which side will keep the pan move scale outside the action part of the background.

Registry
Marks
Cont'd.

Before making this new Registry Mark, be sure the background is on the pegs in its last Horizontal Pan Registry.

Operation
of Sliding-
Peg Camera

These cameras have top and bottom sliding pegs and a movable background board that can be used only in horizontal pans.

Top or bottom sliding-pegs, or the background board can be moved together or separately, in the same or opposing directions. Also, anyone of the three may be held while the other two are panning.

If only one set of sliding pegs are necessary, give the top pegs the preference.

Overlay
Flaps

An Overlay Flap attached to the background can be used if the bottom sliding-pegs are not used at the same time.

An Overlay Flap can be used with the top and bottom pegs in operation if the Overlay Flap is punched and used on either the top or bottom pegs, and the pegs with which it is used are moving at the same speed as the background.

Pan Moves

All Pan Moves for the Top and Bottom pegs or the background must be figured in multiples of 128th of an inch which is the slowest movement possible. (It will not be possible to use the sliding pegs for your scene if it is not figured in multiples of this speed).

Exposing
of Pan Moves

A separate column of Pan Moves will have to be exposed for each of the three movable sections. Do NOT call for the Pan Moves by numbers as in an ordinary pan. Instead, call for the exact speed in inches or fractions thereof, in which each particular section is moving, and precede each marking with the abbreviation for the direction in which it is panning. The abbreviated terms used for simplicity in marking are:

"TP"-----Top Pegs
"BP"-----Bottom Pegs
"BKG"-----Background
"L"-----Left
"R"-----Right
"H"-----Hold

The "right" (R) and "left" (L) must be the directions the pegs are to be moved and not the directions of the section in the scene.

Enumerate carefully each increase or decrease in speed for every frame. When the pan is moving at a steady speed, a line carried down through every exposure required to move at this speed, is all that is necessary. To avoid confusing the symbol for a two exposure hold, with that used for pan speeds, do not use ditto marks when the same speed is required for only two exposures, WRITE EACH MOVE OUT. (Whether an action is held or in a pan, the Pan Moves must be exposed on every exposure sheet of the scene.)

As in an ordinary pan, you must slow in and out of holds.

Also, above each action exposed, indicate on which pegs they are to be used, i.e. "TP" or "BP".

(See sample Exposure Sheet showing columns used for sliding-peg moves.)

Animation
Paper for
Sliding-Peg
Action

Normally, for action animated on the standard peg position (to be inked on sliding-cels), single field sheets of Animation Paper may be used.

The sheet, on which the last possible action can be drawn, is shifted one peg position, centering it in the field. The next sheet is placed on the pegs in normal position to animate subsequent action. Extreme care must be taken to number properly the center peg position on every drawing.

The pegs are exactly four inches apart. You cannot punch new peg holes between the pegs, altering this distance. If you do, your scene cannot be photographed on the sliding-peg camera.

If, at the end of a sliding-peg pan your

Animation Paper for Sliding-Peg Action (cont'd.) action happens to be off-center in the field, you must continue animating in this position until the end of the scene, depending on the sliding-peg registry to keep it centered in the field. This pertains to the top and Bottom sliding-pegs and to the background.

Two-Field Animation Paper There are also Two-Field papers punched for use when necessary. They are to be used for repeats occurring in a setting having actions that stretch two fields long.

For repeats longer than two fields, double and single sheets may be pasted together to get the necessary length. When this is done, make sure the distance between each peg position is four inches, no matter how long the sheet. (When the longer sheets are necessary, call the supply department for them.)

Sliding-Cel Sizes There are 2, 3, 4, 5, and 6 field Sliding-Cels available for use with the standard field.

Four Field Sliding-Cels are the limit on the large field.

Method of Handling an Action Animated in a repeat in One Place In planning for inking a sliding-pegs, the general idea is to have a blank field precede the action when it comes into the scene, and a blank field follow when it goes out of the scene. This limits your longest action in a scene, to four fields on the standard field, and two on the large field.

If an action is in the field at the start of the scene or remains in the field at the end, the repeat may stretch five fields on the standard field and three on the large field.

Method of
Handling an
Action Anim-
ated in a
Repeat in
One Place
(Cont'd.)

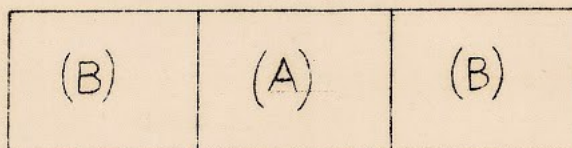
If an action is in the field at the start of a scene and also at the end, the repeat may be as long as the full six fields on the standard field, and four fields, long on the large field.

The animator must plan his scene with notes to the inker as to which cel lengths are to be used, side of cel on which the action is to be inked, (Right, Left or Center) and which pegs are to be used (top or bottom). When these notes are missing, the drawings may erroneously be inked on single field cels.

On the first drawing of every new set of action, planned for Sliding Pegs, a diagram must appear in the upper right hand corner under the number.

Following is the standard diagram to be used.

DWGS. 1 to 32



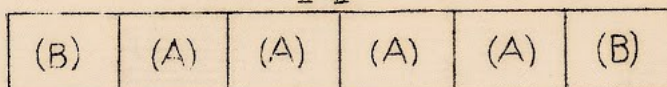
"BP"

("B" stands for "BLANK" --- "A" stands for "ACTION".)

The inker in this case will know that drawings 1 to 32 are to be inked in the center field of a Three Field Sliding Cel on the bottom pegs.

DWGS. 64 to 130

"TP"



In this case drawings 64 to 130 are to be inked on the four center fields of a Six Field Sliding Cel on the top pegs.

Method of Handling An ACTION Animated in a Repeat in one Place The Animator must call for the correct sliding cel lengths in order to avoid handling longer cels than is necessary.

Registry Marks for Repeats on Sliding Cels With this type of action, a Registry Mark must be drawn on the first drawing of the repeat. This Registry Mark is determined by planning the drawing on the board as it will appear in relation to the field at the start of the scene; then marking the center peg line on the drawing.

Pan Lengths must be accurate Keep track of the over-all lengths of your pan in order to know just where the action is in the field, in relation to other actions being used with it. This must be done accurately since the panning under the camera is mechanical and should you miscalculate, your scene will not turn out as you had planned.

When Straight Ahead Action is Animated for a Repeat: When animating straight ahead action to be used as a repeat on sliding-cels, a Shift Chart must be planned so that the drawings can be inked in one registry on the sliding-cels.

Exposing Repeats on TWOS The standard rule for TWOS in a pan, also applies to sliding peg action. (Where an action is in contact with the background, as in walks, etc., it, too, must be exposed on ONES.)

Sliding-Cel action, not in a panning action itself, may be exposed on TWOS during a pan.

Method of Handling
Action Animated
Straight Ahead on
the Pegs

Only Two field Cels need be called for when animating straight ahead on the pegs.

The center line on the center peg, is the key registry position. All the drawings in the scene must have a Registry mark registering to this line. The peg position used for the progression of the action is referred to by a number preceded by the letter "R" (right) or "L" (left) indicating the direction in which the action is moving.

Method of Mark-
ing Peg Registry
Positions on
the Drawings.

The first registry Position at the start of the scene would be "CP-1" (Center Peg 1). If the action moved to the left, the next Registry Position would be "RP-2" (Right-peg 2). Then "RP-3"-----"RP-4"---etc.

For example, if the action should stop on "RP-6" and then start animating the other way, the new Registry Positions would be "LP-5"--"LP-4"---etc.

This method keeps the numbers of the sliding-peg positions in register with the peg positions on the background, for checking purposes.

The peg positions on the background must also be numbers 1---2---3---etc., and these must be the positions corresponding to the animation.

Method of
transferring
Papers on Board
to Animate
Straight Ahead

Single field paper is all that is necessary to animate this type of action.

Animate straight ahead, and as the action reaches the edge of the paper, bring it back on the pegs (calling for the next peg position on ensuing drawings) and continue animating.

Cel Levels

The general rule applying to Cel Levels also applies to sliding-cels.

HEAD ANIMATOR'S O.K.

ANIMATOR'S O.K.

FLEISCHER STUDIOS INC.

SHEET No.

EXPOSURE SHEETS FOR SCENES ON THE SLIDING PEG CAMERAS MUST BE

Job No.

Title LAID OUT AS FOLLOWS:

Scene No.

Animation by

(THIS IS IN ADDITION TO THE GENERAL INFORMATION ON THE SHEETS---
Inbetweened by SET SAMPLE EXPOSURE SHEETS)

Inking by

MUSIC				ANIMATION										CAMERA				
Music Instructions	Mouth Actions	Beats	Dial No.	ACTION	ACTION DWGS.				CUT-OUTS				Dial No.	Pan Moves	Fields	Instructions	TP	BP
					Top		Bottom											
					OLIVE	POPEYE	DOG											
				01	TP	BP	BP			Expose all PAN and SLIDING PEG moves	01	BKG				TP	BP	
				02	31	47A	63			throughout the scene.	02	R-1/16				R-1/16	L-5/8	
				03	↓	48	64			All moves must be figured in multiples of 128th of an inch	03	1/8				1/8		
				04	32	49	65			which is the slowest movement possible.	04	1/4				1/4		
				05	↓	50	66			Moves must be called for in inches or fractions thereof.	05							
				06	33	51	67			To avoid confusing the symbol for two exposure holds with that used for pan speeds,	06							
				07	↓	52	68			do not use ditto marks when the same speed is required for only two exposures. WRITE OUT each move.	07							
				08	34	53	69			Direction (R or L) must precede every move.	08	1/8				1/8		
				09	↓	54	70			Hold is indicated with an (H) on frame which PAN stops.	09	1/16				1/16		
				10	35	55	71			Above each action indicate the pegs on which they are to be used...	10	1/32				1/32		
				11	↓	56	62			TP or BP.	11	(H)				(H)		
				12	36	57	63			It is important that you keep your exposure sheets clear and neat.	12							
				13	↓	48	64			All out-outs must be placed on the back-ground registered to the center peg.	13							
				14	37	49	65			Be sure to indicate on the EXPOSURE SHEET whether an OVERTAY is to be used and whether it is to be a flap attached to the Bkg.	14							
				15	↓	50	66			or on TP, or BP.	15							
				16	38	51	67				16							
				17	↓		68				17							
				18	39		69				18							
				19	↓		70				19							
				20	40		71				20							
				21	↓		72				21							
				22	31		73				22							
				23	↓		74				23							
				24	32	52	75				24							
				25	↓		76				25							
				26	33	53	77				26							
				27	↓		78				27							
				28	34	54	79				28							
				29	↓		80				29							
				30	35	55	81				30							
				31	↓		82				31							
				32	36	56	83				32							
				33	↓		84				33							
				34	37	57	85				34							
				35	↓		86				35							
				36	38		87				36							
				37	↓		88				37							
				38	39		89				38							
				39	↓		90				39							
				40	40	58	91				40							
				41	↓		92				41							
				42	31	59	93				42							
				43	↓		94				43							
				44	32	60	95				44							
				45	↓		96				45							
				46	33	61	97				46							
				47	↓		98				47							
				48	34	62	99				48							
				49	↓		100				49							
				50	35	63	101				50							
					↓		102											

CHAIR

10-B

Sliding Peg Approach Camera

The abbreviated term for this camera is
"S.P. App. Cam.

The camera is equipped with sliding pegs top
and bottom.

You can approach or recede between fields #1
and #16 both in color and Black and White.

Fields and pegs can revolve in a complete circle.
Size of field must be considered - due to the
corners being cut off as the field is turned.

Sliding pegs can be used with the platten in still
position or revolving or at any angle.

The platten must be turned sideways for vertical
pans, because they do not fit under a peg bar.
This reduces the size of the field and requires
animation to be drawn in relation to the camera
rather than to the relation of the pegs.

The diagonal pan problem is the same as the
vertical pan problem.

Before an animator lays out a scene for this
camera it will be well to have him check with
Charles Schettler.

Accents

After the Takes have been selected, the Music Department assembles them in the approximate order of their appearance in the picture, and prepares an O.K. Takes Acetate and a typewritten copy of the Takes recorded on it.

The Head Animator will then underline those syllables which he judges the most suited for accents in animation.

The most emphatic accents will be underlined with red pencil and the secondary accents will be underlined with a brown pencil. These will be the accents indicated on the Exposure Sheets and Exposure Rolls.

Exposure Rolls. Pre-sync Sound. (Green Ex- posure Rolls)

For Pre-sync Dialogue and Sound Effects, the analysis of the sound track is transferred to Green Exposure Rolls, which are clipped on the Exposure Sheets where the tracks are to be used.

The Sync Mark (S-1) must be printed on the Green Exposure Roll by the Music Department, on the same frame as punched in the Sound Track; and the Job Number, Punch Number and Take Number must be printed above each Sync. Mark.

Post-sync Sound. (White Exposure Rolls.)

Post-sync Dialogue will be given to the Animator on White Exposure Rolls, to be clipped on Exposure Sheets where the dialogue is to be used.

Exposure Sheets.

There are two types of Exposure Sheets:

1. GREEN EXPOSURE SHEETS...used with any action planned to definite music. (Pre-sync or post-sync). These sheets are laid out only by the Music Department and no sheets or Exposures are to be added or eliminated without this department's O.K.
2. WHITE EXPOSURE SHEETS....used for action that is not planned to definite music. This means Ad-lib action or action planned to Beats, Phrases or a pattern of music.

Green Exposure
Sheets

If the Recording is a song, (vocal or instrumental) the analysis of the sound track will be given to the Animator on Green Exposure Sheets with the Sync. Mark, Job Number, Punch Number and Take Number properly written in.

When the Animator has finally planned his Scene Cuts on the Green Exposure Sheets, they must be returned to the Music Department to have a new Sync Mark written on the sheets for each cut (S-1, S-2, S-3 etc) These new Sync Marks must all be initialed and dated by the Music Department and immediately punched into the Sound Track in its corresponding position.

Where the Sound "carries over" from one scene to the next, it will not be possible to punch S-2, S-3, etc. on the first frame preceding the sound. In this case, S-2, S-3, etc, must be punched about 2 feet from the beginning of the Scene.

Two or More
Sound Tracks
used Together

When two or more Sound Tracks are being used together they must be clipped to the Exposure Sheets, one over the other. The top ones must be clipped, along the side only, to allow them to be turned for reading those underneath.

In the above case, each Sound Track must have its own Sync Mark.

In the event of Double Tracks, the Timing Department will send these Exposure Sheets to the Music Department for a combination recording.

After the Timing Department has checked the picture in preparation for the Inbetween Department, all Exposure Sheets containing Double Tracks, will be sent to the Music Department for combination into a single track. After these tracks have been combined, the first Exposure Sheet must carry the following note at the top of the Music Column:

TRACKS COMBINED
(Initialed---dated)

Splitting a
Take into
Sections

If the length of a Take must be altered in any way, (i.e. part cut out---leader added in the middle---sections of the Take switched) the Exposure Roll must be returned to the Music Department for necessary adjustments.

Should the Exposure Roll be split into two sections, the new section will be called Sync #2 with the same job, Punch, and Take Numbers. If in three sections, the third will be called Sync #3, etc.

When a sound "carries over" from one scene to another, an additional Sync Mark must be made for the new scene. In this case it must be within 2 Ft. in the second scene. (This is because a Sync Mark on the first frame before the sound, would be out of the length of the scene.)

Should the change in the Exposure Roll consist of adding or cutting but a few frames, a new Sync Mark will not be necessary. Instead the Music Department will adjust the Exposure Roll and the corresponding sound track.

When the above changes become necessary, the Exposure Rolls must be returned to the Music Department where immediate adjustments will be made on both the Exposure Rolls and the corresponding sound tracks. All changes are initialed and dated by the Music Department.

Sounds cut from a Selected TAKE, must not be discarded. They must be filed away with their Job, Punch and Take Number.

ANIMATORS MUST NEVER ALTER OR CUT EXPOSURE ROLLS.

Emphasizing
the Accents
in Action

It is advisable to anticipate accent poses to make them more emphatic. This means you may hit the accent position in the action, as many as 2 frames before the mouth action (which still must be on the "nose".) The scale below gives the anticipated lengths allowable.

Accents occurring from 2 to 7 exposures apart must be on the "nose".

Animation for accents occurring from 8 to more frames apart, may be anticipated by two frames.

Animation for accents occurring from 13 to more exposures apart may be anticipated by two frames.

If found necessary to anticipate any action more than 2 frames ahead, it must be taken up with the Music Department and an initialed O.K. (dated) must appear in the music column on the frame where this pose is to be.

You cannot secure accented action with smooth running, evenly spaced action. You must devise a change of pace to emphasize the accent. In some cases, it might be a slowing up between accented positions, as an anticipation into the next accent. In other actions, it might call for an increase in speed to point out the accent. But in any case, there must be a change of pace between accents.

The greater the change in speed between the accents, the more emphatic the accent.

HOW SOUND ANALYSIS SHOULD BE INTERPRETED INTO ACTION

(Do not confuse these directions for animation action, with the directions for mouth actions, explained in, "HOW TO TRANSFER SOUND ANALYSIS INTO MOUTH ACTIONS, "pages 49.)

Animation Action & Mouth Actions In animating a bit of dialogue or singing, the mouth actions are really secondary. To make it convincing, the action itself is the important thing. This does not mean that mouth actions should be slighted. They must be on the "nose" (accurate) and convincing, but perfect mouth-actions mean nothing, if the action itself is not convincing.

Reading of
Analysis for
Planning Out
Animation
Action

The wide Red Symbols are the most emphatic Accent positions in a series of words.

The wide Brown Symbols are the secondary accent positions, and must never be more accented in the action than the Red positions.

Wide Blue Symbols represent the sounds of least importance. These are only "carry thru" positions in action, and should never be emphasized to the extent of confusion with the Red and Brown accents.

Planning the
Action to Fit
the Sounds

DO NOT tear headlong into a dialogue scene by starting at the first frame of sound and animating to the end of the track, expecting to obtain convincing action. DO NOT try to create an action to put each word over. This tends to make it look confusing. Simplicity will do it!

Listen first, to the acetate record, and study the dialogue you are to animate. You will find there is one important accent pose in every series of words, (the Red accent positions). Roughly, plan out these poses. Then continue roughing out the Brown accent positions, which should give you all the positions necessary, to put that particular dialogue over.

Preparatory Gestures

A Preparatory gesture is a supplementary action preceding an emphatic action.

How to Use Preparatory Gestures

The greater the distance between the Preparatory gesture and the accented action, the more emphatic the accent becomes. This distance varies with the personality and attitude you are trying to put over. For example:

A girl stamps her foot and says, "No"! If she stamped her foot and said, "No" at the same time, it would weaken her attitude; but if she first stamped her foot and then accented the word "no" about $1\frac{1}{2}$ feet later, it would carry more weight.

Action on TWOS

For the sake of animating on TWOS, it is permissible to hit any sound one exposure before the planned frame. In any case, do not plan to have any action hit after the sound it accompanies.

Sound Effects
and Music to
Sound Analysis

The first reaction drawing after a hit or contact point, should be considered the beat or accent position of the sound. For Example:

An object hits a hanging dishpan.
The contact or hit position is
one exposure before the sound.
The first reaction drawing of the
dishpan occurs on the beat or
sound position.

It is desirable to anticipate repetitious actions in music or sound effects to make them more convincing. The following scale will guide you in judging the length of this anticipation:

Reactions occurring from 2 to 7 exposures apart, should be on the "nose".

Reactions occurring from 8 to 12 exposures apart, may be placed on exposure before the beat or sound position.

Reactions occurring from 13 exposures to more, apart, may be placed two exposures before the beat or sound position.

If it is thought necessary to anticipate a beat or sound effect by more than 2 exposures, the Music Department must be consulted and an initialed O.K. (dated) must appear on the frame planned, in the Music Column of the Exposure Sheet.

Walks to be
done to Music

If a walk is to be planned to music, do not plan to have the heel come down on the beat. The flat boot position must be considered the beat. Avoid having the foot come down heel first, if possible.

After completing all of the above, you are ready for applying mouth positions. (See sample exposure sheet (How to Transfer Sound Analysis into Mouth Actions." Page 49.)

HEAD ANIMATOR'S O.K.
ANIMATOR'S O.K.

FLEISCHER STUDIOS INC.

SHEET No.

Job No.

Title

Scene No.

Animation by

Inbetweens by

Inking by

MUSIC				ANIMATION										CAMERA				
Music Instructions	Mouth Actions	Beats	Dial No.	ACTION	ACTION DWGS.					CUT-OUTS					Dial No.	Pan Moves	Fields	Instructions
					Top				Bottom									
(J) B-92			01	HOW TO TRANSFER SOUND ANALYSIS INTO MOUTH ACTIONS!														
(P) 954-A			02												02			
(T) 2			03												03			
			04												04			
ANALYZED 11/3/40			05	(The following pertains to MOUTH ACTIONS only. See "How Sound Analysis														
BY L.H.			06	Should Be Interpreted Into Action" first.)														
			07												07			
TH-			08												08			
THE	(S-I)		09												09			
			10												10			
-E			11												11			
			12												12			
WHEEL			13												13			
WH-			14												14			
			15												15			
EE-			16												16			
			17												17			
-L			18												18			
			19												19			
OF			20												20			
A			21												21			
			22												22			
F-			23												23			
			24												24			
FORTUNE			25												25			
-O-			26												26			
-R-			27												27			
			28												28			
-T-			29												29			
			30												30			
-U-			31												31			
			32												32			
-N-			33												33			
S-			34												34			
			35												35			
-P-			36												36			
			37												37			
-I-			38												38			
			39												39			
-NS			40												40			
			41												41			
			42												42			
			43												43			
			44												44			
			45												45			
			46												46			
			47												47			
			48												48			
			49												49			
			50												50			

ANIMATION AS RELATED TO MUSIC

1. All timing is based on the speed with which film runs through the projector - a rate of 90 feet per minute, or the equivalent of a foot and a half per second. Since a foot of film has 16 exposures, this makes 24 exposures per second.
2. If we wish to determine how many exposures a certain action takes, say an action from "Now" to "Now", guess-work, or judgment would invariably prove to be inaccurate.
3. Instead, we click a stop-watch from "Now" to "Now". This method is more accurate. We can not be very far off. But we can't read this timing very closely either. The error in starting the watch (personal and mechanical) and the possible error in reading may be six or more exposures off.
4. But we can time an interval very accurately and conveniently. 16 beats of music at a 12 exposure beat is 12 feet, 16 beats of 14 exposure beats is 14 feet, etc. If you use a stop watch which reads in feet of film, time a repetition of the interval 16 times. In doing so, if you start counting "one" at the start of the first interval, you must finish at "seventeen". For when you counted "two", only one interval elapsed. Now, this total number of feet for the 16 intervals determines the number of exposures for one interval.
5. For example, if you clock 16 times a certain interval and the watch reads 12 feet, then you have been timing a 12 exposure interval.
6. This method is very convenient because music runs in phrases of 8 and 16 beats.
7. If your stop watch reads in seconds, you should time 24 intervals, stopping at the count of "25".
8. Where music is not laid out for a scene, the progress of tempo throughout the picture should be considered. In general, the beat could start at about 12-ex. or 11-ex. and as the story progresses get faster down to about 9-ex. In the case of a very wild finish we can go down to a minimum, or the fastest beat of 7-ex., but remember that beats below 9-ex. are for really wild action (such as a machine out of control). At this rapid beat, action or hits may be to 14-ex. instead of 7-ex.

9. Popeye pictures - unless music is laid out - might start at a 12-ex. beat, work faster as the story progresses to a 10 or 9-ex. The spinach episode should be 9-ex. and after the spinach a 15-ex. which is really alternate 8 and 7-ex.
10. In general, the pictures should progress down from a 12-ex. to 9-ex. and to a 7-ex. in exceptionally fast cases.
11. Do not select a beat above 12-ex. without consulting the Music Department.
12. What may be a fast beat for a particular piece of music, may be a slow beat for another, but in general, the beats mentioned above are most practical.
13. When you time a particular action, do not clock the timing and then go right ahead and use that beat. Consider what the beat of the picture should be at that particular stage of the story, and try to adjust the timing so that it may go to the desired beat. One may argue that it would spoil the animation to change it, but in most cases, it can easily be made to fit the desired beat without much difficulty.
14. If an animator times various actions in a picture, all within a short period of time, and all with different beats, the music score cannot follow it, and many good opportunities for synchronous action become too difficult to handle and consequently lost to the picture.
15. Do not get the impression that the beat is some thing to worry about all through the picture. It is only repeat actions that suggest rhythm, and walking steps that require consideration of a beat. Otherwise, the animation can be entirely ad lib, with no regard to a beat.
16. If an action occurs several times, and it is desirable to have it happen, either every single beat, every two beats, four beats or eight beats. Multiples of four or eight beats are more desirable.
17. In attempting to time an action, should you have difficulty in tapping out two, three or four taps to a beat, the following method is suggested:
18. With a metronome in action, when you want one tap to a beat, say the word "chair" to every beat, tapping once with each word.

19. When you want two taps to a beat say the word "table" to each beat and tap to each syllable, thus giving two taps to each beat.
20. For three taps per beat, say the word "regular" and tap once to each syllable.
21. For four taps say "pitter-patter" being sure to say the entire word for each beat.
22. Where music is laid out to a scene, and you seek a logical spot for a particular action to occur, the tendency is to find an emphatic note or word of the song and place it there, but most often that is the least desirable spot for a sound effect. Usually, the best place is a beat that has no note or word on it. However, it required a knowledge of music to find the most desirable spot and it will usually be found worthwhile to consult the Music Department. They may find a good place between two certain beats, depending of course, on the music.
23. In showing sparks for a hit, it is unnecessary in small hits to animate the sparks away. Two alternating drawings not traced up, giving an off-register is usually sufficient.
24. Musical taps which have sparks animating away invariably give the effect of the picture being late, since the eye doesn't see the tiny sparks but does see the larger ones, when it is too late for good synchronization.
25. If it is desired that the eye see fast synchronization objects that hit quickly, in a rapid succession, these must not be far apart on the screen.
26. Sometimes we animate a crowd clapping hands and stamping its feet. If done to music, it is best to consult the Music Department. In general, however, it is better to have the "stamp" on the beat and the "clap" on the half beat, rather than the stamping and clapping simultaneously.
27. Scene changes are best done on the first beat of a phrase, or sentence or music, but the actual cut should be on the half beat. Never cut to a scene on the beat, except for a special effect in the music.
28. Do not start dialogue or singing on the first frame of the cut. it should be at least six exposures after the start.
29. Never cut away from a repeat with the action going toward the next beat located in the ensuing scene. In repeats, cut on the action coming out of the last repeat only. There is a tendency to underestimate the amount of time required for a character to react to something it hears or feels. When in doubt about anything concerning a synchronization, consult the Music Department.

ACETATE RECORDS

For convenience in handling, filing and reference, Acetate Recordings are divided into eight classifications according to the purpose for which the ACETATE is to be used. These classifications are given the following names:

Types of Recordings on Acetate	1.	DUMMY	ACETATE
	2.	O.K. TAKES	"
	3.	AUDITION	"
	4.	TEST	"
	5.	P.B.G. ROTO	"
	6.	P.B.G. SOUND	"
	7.	SYNC RECORDING	"
	8.	MIXING	"

Explanations

(The first two types concern animation only.)

1. DUMMY ACETATE is a recording of music or sound providing a tempo, mood or background for animation, and is not a final sound.
2. O.K. TAKES is a record of selected takes from pre-sync sound on film to aid animators in visualizing action. When possible, individual speeches, songs or sounds will be recorded in the order of the script, with a short, silent space between each.
3. AUDITION ACETATE is a record of possible talent made to determine microphone qualities, and may, or may not be kept on file according to Director's instruction.
4. TEST ACETATE is a record made for technical purposes and is filed only in the Sound Recording Department.

5. P.B.G. ROTO ACETATE (meaning) PLAYBACK GUIDE FOR ROTOSCOPE) is a record of pre-sync dialogue, songs or sound which is played in sync with the camera, to guide an actor when being photographed for rotoscope.

All such records should be made with not less than 4 beats in the tempo of the sound just preceding it, as an Attack Cue. Thus the actor knows that sound begins on the 5th beat.

If silent action precedes a sound, or occurs between two sounds, Tempo Beats should be provided. Should these beats be more than 8 in number, spoken numbers should be called into the recording as an aid in spacing silent action.

Sound Film prepared for such recording, should have a Start Mark on leader of 192 frames in advance of the sound. The last 5 feet of this leader may be used for cue beats.

6. P.B.G. SOUND ACETATE (which means PLAY BACK GUIDE FOR Recording Sound.) is a record of sound or accompaniment to be played back to a singer or speaker through earphones as a pitch or tempo guide in making further recordings.

In all cases, not less than 4 beats in the tempo of the sound should be recorded preceding its beginning as Attack Cue.

Also, the title and musical key of the number should be called into the recording when possible.

7. SYNC RECORDING ACETATE - any record on acetate to be played with picture.

This type of recording must be made with a spiral Start Mark.

Always provide a leader with Start Mark exactly 192 frames in advance of the sound or of the picture containing the sound (if not recorded with the picture). If the latter case prevails, use the Standard Start Mark of the picture, which is also 192 frames in advance.)

This name (SYNC. RECORDING ACETATE) also applies to the Playback Record made simultaneously with a short recording on film.

The OKAY TAKE of such a recording will probably be kept permanently in the file. Other takes should be disposed of upon release of picture.

8. MIXING ACETATE is a record of any sound to be mixed into a later recording and should always have a Spiral Start Mark except when the sound is for background or is non-synchronous.

Note: Each record will bear a chronological serial number for filing with the type name and other identifying matter. The file for all records except Text Records will be maintained by the Music Department. Records should be returned to this department promptly. The Sound Department will keep a chronological record of all Acetate Recordings.

Hand-
ling:

Remember that Acetate Records are not as sturdy as the commercial type of disc. They should be kept free of dust and played only with the special steel needle provided for the purpose. When playing, raise and lower pickup head carefully. Do not permit the needle to slide laterally across the grooves, as one such scratch destroys the record.

When the record is not being played, keep

It in its protective envelope and return it to the files as soon as possible.

Ordering
Acetates

When ordering Acetates, use the form provided for that purpose and give the name of the type of recording required. See to it that Sound Film is prepared to suit the nature of that recording. Orders for acetates by the animators must be O.K'd by either Izzy Sparber or Seymour Kneitel.